

Purchase Order Receipt Listing

Tuesday, October 11, 2016 3:34:39 PM

Page 1 of 1

All amounts are calculated in domestic currency.

All Vendors PO ID PO33860 All Receipt Dates All Line Item Types
All Item ID/GL/VOs All Rec. Employees All Currencies
Grouped by Vendor ID

| Purchase Order ID/ Curr Type | Line Nbr/ Insp Req | Project ID | Reference/ Description/ Cert Std | PO U/M / Stock U/M | Required Date Required Qty | Recv Date/ Recv Emp | Recv Qty (PO U/M) | Cost Per Unit/ Recv Value | Inspected Qty/ Rejected Qty (PO U/M) | MRB Qty/ MRB Reject Qty | Book Amt |
|---|-----------------------|------------|--|-----------------------|-------------------------------|------------------------|----------------------|------------------------------|--|----------------------------|----------|
| Vendor ID \ Vendor Name PO33860 USD | 1 | No | M304TR0.375W.065 f 304 RD Tube .375 x f .065W ml35857 | | 10/14/2016 20.0000 | 10/11/2016 PLOU01 | 20.0000 | | 0.0000 0.0000 | 0 0 | \$0.00 |
| | 3 | No | M304TR0.750W.049 f 304 RD Tube .750 x f .049W ml35857 | | 10/14/2016 60.0000 | 10/11/2016 PLOU01 | 60.0000 | | 0.0000 0.0000 | 0 0 | \$0.00 |
| | 4 | No | M6061T6T0.500W.05 f 8 6061-T6 RD Tube f .500 x.058W ml35857 | | 10/14/2016 84.0000 | 10/11/2016 PLOU01 | 84.0000 | | 0.0000 0.0000 | 0 0 | \$0.00 |
| | 5 | No | M6061T6T0.625W.12 f 5 6061-T6 RD Tube f 0.625 X.125W ml35857 | | 10/14/2016 24.0000 | 10/11/2016 PLOU01 | 24.0000 | | 0.0000 0.0000 | 0 0 | \$0.00 |
| | | | | | | | | | | | |

Total Received Quantity:
Total Qty to Inspect (PO U/M):
Total Reject Quantity:
Total Receipt Value:
Total Balance Due Quantity:

188.0000
0.0000
0.0000
\$0.00
0.0000



O'Neal High-Performance Metals Group



**Packing
Slip**

ORDER NO.: 60616339

FROM: CRAN

PAGE 1

CUST NUMBER: 1203820 NET WGT: 39.800 REQ.DATE: 10/13/16 CONFIRMED
SOLD TO: SHIP TO:
DART AEROSPACE LTD DART AEROSPACE LTD
1270 ABERDEEN ST 1270 ABERDEEN ST
HAWKESBURY ON HAWKESBURY ON
CANADA CN K6A 1K7 ONTARIO CANADA CN K6A 1K7

SALESPERSON: DONNA SMALLEY SHIP BY: 10/06/16
TERMS: NET 30 DAYS VIA: COMMON CARRIER
F.O.B.: SHIPPING POINT FREIGHT: PREPAID
CUST ORD NO.: PO33860 RELEASE NO.:
RECEIVING PHONE:

LINE ITEM DESCRIPTION WIDTH LENGTH
0001 36311 SMLS CD 304/L A269 3/8 OD X .065 WA 20' ML

| | | | | |
|------|-----------|-------------|-------------|-------|
| CLN# | ORD QTY | INVOICE QTY | SHIPPED QTY | WT |
| | 20.000 FT | 20.000 FT | 20.000 FT | 4.303 |

PCS
1

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: 2B999.g Export License: NLR Expiration Date: 0/00/00
PO:49329273 HT:YX1410664 PC: 1 CUSTOMER QTY: 20.000 UOM FT
MLT:CHINA MFG:CHINA SLB/CL:4-34

0002 36860 SMLS CD 304/L A269 3/4 OD X .049 WA 20' CL

| | | | | |
|------|-----------|-------------|-------------|--------|
| CLN# | ORD QTY | INVOICE QTY | SHIPPED QTY | WT |
| | 60.000 FT | 60.000 FT | 60.000 FT | 22.003 |

PCS
3

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: 2B999.g Export License: NLR Expiration Date: 0/00/00
PO:49339072 HT:YX1501783 PC: 3 CUSTOMER QTY: 60.000 UOM FT
MLT:CHINA MFG:CHINA SLB/CL:9-110

0003 42276 D6061-T6 1/2 OD X .058 WA 12 FT ML

| | | | | |
|------|-----------|-------------|-------------|-------|
| CLN# | ORD QTY | INVOICE QTY | SHIPPED QTY | WT |
| | 84.000 FT | 84.000 FT | 84.000 FT | 7.953 |

PCS
7

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00
PO:49342317 HT:35361464 PC: 7 CUSTOMER QTY: 84.000 UOM FT
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:324203

SP16-10-11

THANK YOU FOR THIS ORDER

TERMS AND CONDITIONS APPLICABLE TO THE SALE OF THESE
PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL
REVIEW.
<http://www.twmetals.com/invoice-terms.html>



O'Neal High-Performance Metals Group



Packing Slip

ORDER NO.: 60616339

FROM: CRAN

PAGE 2

CUST NUMBER: 1203820 NET WGT: 39.800 REQ.DATE: 10/13/16 CONFIRMED
 SOLD TO: SHIP TO:
 DART AEROSPACE LTD DART AEROSPACE LTD
 1270 ABERDEEN ST 1270 ABERDEEN ST
 HAWKESBURY ON HAWKESBURY ON
 CANADA CN K6A 1K7 ONTARIO CANADA CN K6A 1K7

SALESPERSON: DONNA SMALLEY SHIP BY: 10/06/16
 TERMS: NET 30 DAYS VIA: COMMON CARRIER
 F.O.B.: SHIPPING POINT FREIGHT: PREPAID
 CUST ORD NO.: PO33860 RELEASE NO.:
 RECEIVING PHONE:

| LINE | ITEM DESCRIPTION | WIDTH | LENGTH |
|------------|---------------------------|-------|--------|
| 0004 42588 | D6061-T6 5/8 OD X .125 WA | 12 FT | ML |

| CLN# | ORD QTY | INVOICE QTY | SHIPPED QTY | WT |
|------|-----------|-------------|-------------|-------|
| | 24.000 FT | 24.000 FT | 24.000 FT | 5.541 |

PCS
2

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00
 PO:49330211 HT:F001858850001 PC: 2 CUSTOMER QTY: 24.000 UOM FT
 MLT:UNITED STATES MFG:UNITED STATES SLB/CL:218040

BROKERS KUEHNE AND NAGEL LTD

| AREA | TYPE OF PKG | PKGS | GRS WEIGHT | WIDTH | LENGTH | HGHT |
|------|-------------|-------|------------|-------|---------|------|
| B | REDDICRATE | 1.000 | 80.000 | | 20.5000 | |

1.000 80.000

BY: GS
 RT 000-

UNLOAD TYPE: NONE SPECIFIED

DATE SHIPPED _____

DATE FILLED _____

THANK YOU FOR THIS ORDER

TERMS AND CONDITIONS APPLICABLE TO THE SALE OF THESE
 PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL
 REVIEW.
<http://www.twmetals.com/invoice-terms.html>



O'Neal High-Performance Metals Group



**Packing
Slip**

ORDER NO.: 60616339

FROM: CRAN

PAGE 3

| | | | |
|----------------------------|---------------------|--------------------|------------|
| CUST NUMBER: 1203820 | NET WGT: 39.800 | REQ.DATE: 10/13/16 | CONFIRMED |
| SOLD TO: | SHIP TO: | | |
| DART AEROSPACE LTD | DART AEROSPACE LTD | | |
| 1270 ABERDEEN ST | 1270 ABERDEEN ST | | |
| HAWKESBURY ON | HAWKESBURY ON | | |
| CANADA | CN K6A 1K7 | ONTARIO CANADA | CN K6A 1K7 |
| SALESPERSON: DONNA SMALLEY | SHIP BY: 10/06/16 | | |
| TERMS: NET 30 DAYS | 27 ENGLEHARD DRIVE | | |
| F.O.B.: SHIPPING POINT | MONROE TWP NJ 08831 | | |
| CUST ORD NO.: PO33860 | | | |
| VIA: COMMON CARRIER | | | |
| FREIGHT: PREPAID | | | |
| RELEASE NO.: | | | |
| RECEIVING PHONE: | | | |

"TW Metals MSDS data is available on our web site at www.twmetals.com. MSDS data can be found under the Technical Resources Tab, Product Statistics & Data and the TW Metals MSDS's heading. If you do not have web site access you may telephone 610-458-1300 and we will mail or fax a copy of our current MSDS data to your location."

"CERTIFICATE OF CONFORMANCE"

"TW Metals certifies that the material supplied on this purchase order and contained in the heat/lot number referenced above has been manufactured, inspected, and tested in accordance with the material specification. These records are on file at TW Metals. Packaging material for shipments to Europe and China consists of manufactured wood products and complies with the European emergency measures for coniferous non-manufactured wood packing material"

Authorized Test Report Clerk *C. J. Leamon* Date: 10/06/16

These commodities have been exported from the United States in accordance with the U.S. export control laws, export administrations regulations. Diversion contrary to U.S. law prohibited.

THANK YOU FOR THIS ORDER

TERMS AND CONDITIONS APPLICABLE TO THE SALE OF THESE PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL REVIEW.
<http://www.twmetals.com/invoice-terms.html>

KAISER ALUMINUM FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

| | | | | | |
|---|--------------------------|--------------------------------|---|--|----------------------|
| CUSTOMER PO NUMBER: M49330211-1 | | CUSTOMER PART NUMBER: 42588 | | PRODUCT DESCRIPTION: Seamless Tube/Pipe | |
| KAISER ORDER NUMBER: 218040 | LINE ITEM: 001 | SHIP DATE: 04/13/2015 | KAISER LOT NUMBER: F00185885 | ALLOY: 6061 | TEMPER: T6 |
| WEIGHT SHIPPED: 366.000 LB | QUANTITY: 132.000 PCS | B/L NUMBER: 218440 | DIAM/DAF/THKNS: | WIDTH: | LENGTH: 12.000 FT |
| SHIP TO: TW METALS INC 27 ENGLEHARD DRIVE EXIT 8A OFF NJ TPK MONROE TWP, NJ 08831 USA | | | SOLD TO: TW METALS INC 760 CONSTITUTION DRIVE SUITE 204 EXTON, PA 19341 USA | | |

Actual Physical Properties

| REFERENCE | DASH# | SAMPLE# | UTS (KSI) | YTS (KSI) | ELONG% | HARDNESS | CON%IACS | BEND |
|-----------|-------|---------|-----------|-----------|--------|----------|----------|------|
| F00185885 | 0001 | 1 | 45.9 | 44.0 | 16.0 | N/A | N/A | N/A |

Chemical Composition (wt%), Aluminum Remainder

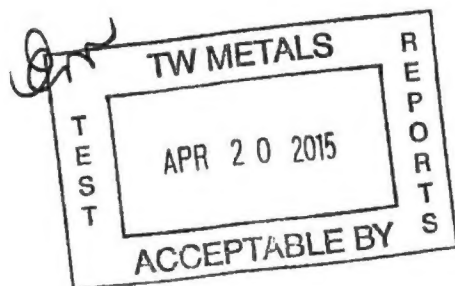
| LIMITS | Si | Fe | Cu | Mn | Mg | Cr | Zn | Ti | Pb | Bi | Zr | Ea | Tot |
|---------|------|------|------|------|------|------|------|------|-----|-----|-----|------|------|
| Maximum | 0.80 | 0.70 | 0.40 | 0.15 | 1.20 | 0.35 | 0.25 | 0.15 | NA | NA | NA | 0.05 | 0.15 |
| Minimum | 0.40 | 0.00 | 0.15 | 0.00 | 0.80 | 0.04 | 0.00 | 0.00 | NA | NA | NA | 0.00 | 0.00 |
| D39623 | .57 | .26 | .22 | .04 | 1.01 | .06 | .01 | .02 | .00 | .00 | .00 | .01 | .02 |

Applicable Requirements:

Description: OD: 0.6250"; Wall: 0.1250"; Round @
AMS-4082P AMS-WW-T-700/6B ASTM B210-12 WW-T-700/6F
WE TAKE EXCEPTION TO PARA. 5.2.1., Per AMS-4082P, WAS NOT OILED.
This Product Complies to FAR BAA, DFARS BAA, FAR TAA
COMPLIES TO DIN EN 10204 JAN 2005
No Weld Repair. Mercury Free.

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA
MATERIAL COMPLIES WITH FAR BAA (FAR 52.225-1, BUY AMERICAN ACT- SUPPLIES), DFARS BAA
(DFARS 252.225-7001 BUY AMERICAN ACT & BAL OF PAYMENTS PROG), AND FAR TAA (FAR 52.225-5
TRADE AGREEMENTS).



KAISER
ALUMINUM
FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC ('Kaiser') hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms & conditions of sale. Test reports are on file subject to examination.

Linda Adkins, Quality Manager

Linda Adkins

Plant Serial: 00019096
Kaiser Order Number: 218040
Line Item: 001

MILL TEST REPORT

| Purchaser.: TW METALS-Cranbury | | | | Certificate No.: 15-5-23 | | | | | |
|---|----------------------------|---------------------------------|------------------------------|---|------------------------|-----------------------------------|----------------|----|----|
| Contract No.: TWM P.O.No.: M49329273 | | | | Date of Issue.: 2015.5.7 | | | | | |
| Commodity: Stainless Steel Seamless Tubes | | | | Specifications: ASTM A213-14/ASME SA213-13/ASTM A269-14 EAW | | | | | |
| Process: Cold Drawn | | | | Delivery Condition: OD Polished to 240 Grit | | | | | |
| Steel Grade | Heat Number | Lot Number | Dimensions | Quantity | | | | | |
| | | | | Pieces | Feet | | | | |
| TP304/TP304L | YX1410-664 | 4-34 | 3/8" x 0.065" x 20' | 250 | 5,000 | | | | |
| Chemical Composition by Weight (%) | | | | | | | | | |
| Element | C | Mn | P | S | Si | Cr | Ni | Mo | Co |
| Requirements | ≤0.035 | ≤2.00 | ≤0.045 | ≤0.030 | ≤1.00 | 18.00-20.00 | 8.00-12.00 | - | - |
| Ladle Analysis | 0.010 | 0.63 | 0.028 | 0.001 | 0.46 | 18.33 | 8.05 | - | - |
| Product Analysis | 0.019 | 0.79 | 0.033 | 0.001 | 0.51 | 18.52 | 8.50 | - | - |
| Mechanical Properties | | | | | | | | | |
| Test Item | Elongation (% in 2") | | Tensile Strength (PSI) Rm | | | Yield Strength (PSI) Rp / 0.2% | | | |
| Requirements | ≥35 | | ≥75,000 | | | ≥30,000 | | | |
| Test Results | 63/64 | | 92,000/93,000 | | | 36,000/37,000 | | | |
| Test Item | Reduction of Area Z (%) | Hardness | Cold Bend Test | Flaring Test | Flattening Test | Flange Test | P.M.I. Test | | |
| Requirements | - | HRB≤80 | - | 30% | e=0.09 | - | - | | |
| Test Results | - | 77/79 | - | Passed | Passed | - | OK | | |
| Test Item | Eddy Current Test | Air Underwater Pressure Test | Ultrasonic Test | Intergranular Corrosion Test | Macroscopic Inspection | | | | |
| Requirements | ASTM E 426 | - | - | ASTM A262 E | End Cut | Appearance | | | |
| Test Results | Passed | - | - | OK | OK | OK | | | |

ISO 9001:2008 Certified by Intertek 110703068

PED Certified by SZUTEST 2195-PED-1221604

Additional Remarks:

- (1) All tubes annealed to above 1900 Deg F and water quenched below 800 Deg F in 3 minutes
- (2) All tubes tested per ASTM A1016-14
- (3) Materials is NACE MR0103-2007 compliant (per Section 2.5)
- (4) Materials is NACE MR0175/ISO 15156-2003 compliant (per Section 4.2.1)
- (5) In Compliance with EN 10204-3.1
- (6) In Compliance with RoHS Stipulation
- (7) No weld repair performed
- (8) Free from mercury contamination
- (9) Free from radioactive contamination
- (10) Billets melt and pipes/tubes manufactured in China
- (11) All tubes 100% PMI tested
- (12) All tubes 100% Eddy Current tested

**CANNOT CERTIFY COMPLIANCE
FAR BAA / DFARS BAA / FAR TAA**

By:



James Shi

James Shi / Manager

Quality Control Department

We hereby certify that this report is true and correct.

Shanghai Pufa Stainless Steel Pipe Factory
No. 59, Shuangye Road, Wanggang, New Pudong District, Shanghai, China

| | | | |
|------|---------------|--|---------|
| TEST | TW METALS | | REPORTS |
| | JUN 17 2015 | | |
| | ACCEPTABLE BY | | |

MILL TEST REPORT

| Purchaser.: TW METALS-Cranbury | | | | Certificate No.: 15-11-44 | | | | | |
|---|----------------------------|---------------------------------|------------------------------|---|------------------------|-----------------------------------|----------------|-------|----|
| Contract No.: TWM P.O.No.: M49339072 | | | | Date of Issue.: 2015.11.5 | | | | | |
| Commodity: Stainless Steel Seamless Tubes | | | | Specifications: ASTM A213-15/ASME SA213-13/ASTM A269-14el EAW | | | | | |
| Process: Cold Drawn | | | | Delivery Condition: OD Polished to 240 Grit | | | | | |
| Steel Grade | Heat Number | Lot Number | Dimensions | | | | Quantity | | |
| | | | | | | | Pieces | Feet | |
| TP304/TP304L | YX1501-783 | 9-110 | 3/4" x 0.049" x 20" | | | | 250 | 5,000 | |
| Chemical Composition by Weight (%) | | | | | | | | | |
| Element | C | Mn | P | S | Si | Cr | Ni | Mo | Co |
| Requirements | ≤0.035 | ≤2.00 | ≤0.045 | ≤0.030 | ≤1.00 | 18.00-20.00 | 8.00-12.00 | - | - |
| Ladle Analysis | 0.012 | 0.68 | 0.031 | 0.001 | 0.37 | 18.35 | 8.05 | - | - |
| Product Analysis | 0.019 | 0.70 | 0.033 | 0.002 | 0.39 | 18.37 | 8.31 | - | - |
| Mechanical Properties | | | | | | | | | |
| Test Item | Elongation (% in 2") | | Tensile Strength (PSI) Rm | | | Yield Strength (PSI) Rp / 0.2% | | | |
| Requirements | ≥35 | | ≥75,000 | | | ≥30,000 | | | |
| Test Results | 63/64 | | 88,000/89,000 | | | 33,000/34,000 | | | |
| Test Item | Reduction of Area Z (%) | Hardness | Cold Bend Test | Flaring Test | Flattening Test | Flange Test | P.M.I. Test | | |
| Requirements | - | HRB≤80 | - | 22% | e=0.09 | - | - | | |
| Test Results | - | 75/77 | - | Passed | Passed | - | OK | | |
| Test Item | Eddy Current Test | Air Underwater Pressure Test | Ultrasonic Test | Intergranular Corrosion Test | Macroscopic Inspection | | | | |
| Requirements | ASTM E 426 | - | - | ASTM A262 E | End Cut | Appearance | | | |
| Test Results | Passed | - | - | OK | OK | OK | | | |

ISO 9001:2008 Certified by Intertek 110703068

PED Certified by SZUTEST 2195-PED-1526002

Additional Remarks:

- (1) All tubes annealed to above 1900 Deg F and water quenched below 800 Deg F in 3 minutes
- (2) All tubes tested per ASTM A1016-14
- (3) Materials is NACE MR0103-2007 compliant (per Section 2.5)
- (4) Materials is NACE MR0175/ISO 15156-2003 compliant (per Section 4.2.1)
- (5) In Compliance with EN 10204-3.1
- (6) In Compliance with RoHS Stipulation
- (7) No weld repair performed
- (8) Free from mercury contamination
- (9) Free from radioactive contamination
- (10) Billets melt and pipes/tubes manufactured in China
- (11) All tubes 100% PMI tested
- (12) All tubes 100% Eddy Current tested

**CANNOT CERTIFY COMPLIANCE
FAR BAA / DFARS BAA / FAR TAA**

DAS
14
9-89

By:



James Shi

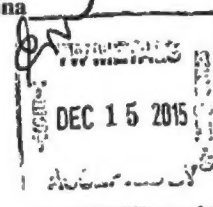
James Shi / Manager

Quality Control Department

We hereby certify that this report is true and correct.

Shanghai Pufa Stainless Steel Pipe Factory

No. 59, Shuangye Road, Wanggang, New Pudong District, Shanghai, China





A COMPANY OF MUELLER INDUSTRIES

PRECISION TUBE CO.
287 WISSAHICKON AVE.
NORTH WALES PA 19454

Control No: 171317

CERTIFIED TEST REPORT

| CUSTOMER PURCHASE ORDER NO. | CUST. ORD. NO. | PRECISION TUBE P/N |
|-----------------------------|----------------|--------------------|
| 49342317 LINE 001 | 324203 | 24A050000580003 |

SOLD: TW METALS
TO 235 TUBEWAY
CAROL STREAM, IL 60188
UNITED STATES

SHIP: TW METALS
TO 235 TUBEWAY
CAROL STREAM, IL 60188
UNITED STATES

| QUANTITY ORD. | DESCRIPTION | QTY. SHIPPED | DATE SHIPPED |
|---------------|--|--------------|--------------|
| 3336 FT | METAL - 6061 ALUM TEMPER - T6 SPEC - AMS 4082P WW-T-700/6F AM 2 AMS-WW-T-700/6B ASTM-B-210-12 LENGTH - 12 FT LGTH TOL +.1250 IN -.0000 IN SHAPE - ROUND FINISH - STRAIGHT EXACT LENGTHS OD .5000 +.0030 -.0030 ID WALL .0580 +.0040 -.0040 | 3528 FT | 01/20/16 |



MECHANICAL PROPERTIES

| SAMPLE # | TENSILE STRENGTH (P.S.I.) | YIELD STRENGTH (P.S.I.) | ELONGATION IN 2 INCHES (%) | ROCKWELL HARDNESS | AVERAGE GRAIN SIZE (MM.) |
|----------|---------------------------|-------------------------|----------------------------|-------------------|--------------------------|
| 1 | 45,602 | 41,239 | 17 | | |

DESTRUCTIVE TESTS DAS

14
9-89 16/10/22

Comments: FAR BAA COMPLIES, DFARS BAA COMPLIES, FAR TAA COMPLIES

NON-DESTRUCTIVE TESTS

EDDY CURRENT: PASS

CHEMICAL COMPOSITION

ALLOY: 6061 HEAT: TRACEABILITY #: 35361464
RAW MATL VENDOR: PT56438 - Kaiser Aluminum

| | Si | Fe | Cu | Mn | Mg | Cr | Zn | Ti | Al |
|-----|------|------|------|------|------|------|------|------|------|
| Min | 0.40 | | 0.15 | | 0.80 | 0.04 | | | Rem. |
| Max | 0.80 | 0.70 | 0.40 | 0.15 | 1.20 | 0.35 | 0.25 | 0.15 | |

OTHER ELEMENTS: 0.05 MAX EACH / 0.15 MAX TOTAL

We hereby certify that the material has been manufactured and tested in accordance with the requirements of the applicable specifications and descriptions set forth on Precision Tube's sales acknowledgement. During the manufacturing, testing, and inspection, the product did not come into direct contact with mercury or any of its compounds, nor with any mercury containing device employing a single boundary containment. Test results indicate that the material is compliant with the current revision of the RoHS Directive (2011/65/EU).

Manufactured in the USA
QMS Registered to ISO 9001: 2008

By: Art Onalita
Art Onalita
QA Manager

01/20/16
Page: 1 of 1

JB

KAISER ALUMINUM

FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
2425 STEVENS DRIVE
RICHLAND, WA 99352

| | | | | | |
|--|---------------------------------|---|--|--|-----------------------------|
| CUSTOMER PO NUMBER: PT56438 | | CUSTOMER PART NUMBER: SPIRIT-371850 | | PRODUCT DESCRIPTION: 5.400 LB/PC .600 LB/-0 LB 1.312 OD X .085 WALL ESRT | |
| KAISER ORDER NUMBER: 319575 | LINE ITEM: 001 | SHIP DATE: 12/11/2015 | KAISER LOT NUMBER: 50751-312 | ALLOY: 6061 | TEMPER: O |
| WEIGHT SHIPPED: 4046.000 LB | QUANTITY: 728.000 PCS | B/L NUMBER: 004904 | DIAM/DAF/THKNS: | WIDTH: | LENGTH: 13.984 FT |
| SHIP TO: PRECISION TUBE CO 287 WISSAHICKON AVENUE N. WALES, PA 19454 USA | | | SOLD TO: MUELLER INDUSTRIES, INC PRECISION TUBE 8285 TOURNAMENT DRIVE STE. 150 MEMPHIS, TN 38125 USA | | |



Actual Physical Properties

| REFERENCE | DASH# | SAMPLE# | UTS (KSI) | YTS (KSI) | %Elong in 2 | HARDNESS | CONDUCT. | BEND |
|-----------|-------|---------|-----------|-----------|-------------|----------|----------|------|
| 50751-312 | 0001 | 0002 | 18.0 | 5.6 | 28.5 | NA N/A | N/A | N/A |
| 50751-312 | 0001 | 0003 | 18.4 | 5.3 | 28.0 | NA N/A | N/A | N/A |
| 50751-312 | 0001 | 0004 | 18.4 | 5.7 | 27.6 | NA N/A | N/A | N/A |
| 50751-312 | 0001 | 0005 | 17.7 | 5.1 | 27.2 | NA N/A | N/A | N/A |

Chemical Composition (wt%), Aluminum Remainder

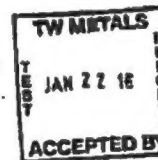
| LIMITS | Si | Fe | Cu | Mn | Mg | Cr | Zn | Ti | Pb | Bi | Zr | Ea | Tot |
|---------|------|------|------|------|------|------|------|------|-----|-----|-----|------|-----|
| Maximum | 0.80 | 0.70 | 0.40 | 0.15 | 1.20 | 0.35 | 0.25 | 0.15 | NA | NA | NA | 0.05 | .15 |
| Minimum | 0.40 | 0.00 | 0.15 | 0.00 | 0.80 | 0.04 | 0.00 | 0.00 | NA | NA | NA | 0.00 | .0 |
| F75382 | .58 | .35 | .22 | .05 | .98 | .09 | .06 | .03 | .00 | .00 | .00 | .01 | .02 |
| F82351 | .61 | .30 | .26 | .05 | 1.03 | .08 | .05 | .02 | .00 | .00 | .00 | .01 | .02 |

Applicable Requirements:

ASTM-B241-12 NON-STENCILED ASTM-B221-13 ASTM-B345-11 AMS-QQ-A-200/8 97(R07) TYPE I
UNS#A96061 Also conforms to EN 10204 3.1

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA
MERCURY IS NOT A NORMAL BACKGROUND ELEMENT IN ALUMINUM ALLOYS. NEITHER MERCURY NOR ANY OF ITS COMPOUNDS ARE UTILITIZED BY KAISER ALUMINUM IN THE MANUFACTURE OF THIS MATERIAL.



Plant Serial: 00013235
Kaiser Order Number: 319575
Line Item: 001

KAISER
ALUMINUM
FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

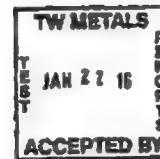
KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
2425 STEVENS DRIVE
RICHLAND, WA 99352

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

JOSEPH AMES, QUALITY MANAGER

Jph



MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304TR0.750W.049

PO / BATCH NO.: 33860/135857

DATE: 16/10/12

MATERIAL CERT REC'D: yes

THICKNESS ORDERED: .049W

QUANTITY RECEIVED: 60

THICKNESS RECEIVED: .044W

QUANTITY INSPECTED: 60

SHEET SIZE ORDERED: _____

QUANTITY REJECTED: _____

SHEET SIZE RECEIVED: _____

| DESCRIPTION | NCR (Check Y/N) | | COMMENTS |
|--|---------------------------------------|---------------------------------------|------------------------|
| SURFACE DAMAGE | <input checked="" type="checkbox"/> Y | <input checked="" type="checkbox"/> N | |
| CORRECT FINISH | <input checked="" type="checkbox"/> Y | <input checked="" type="checkbox"/> N | |
| CORROSION | <input checked="" type="checkbox"/> Y | <input checked="" type="checkbox"/> N | |
| CORRECT GRAIN DIRECTION | <input checked="" type="checkbox"/> Y | <input checked="" type="checkbox"/> N | |
| CORRECT MATERIAL | <input checked="" type="checkbox"/> Y | <input checked="" type="checkbox"/> N | |
| CORRECT THICKNESS | <input checked="" type="checkbox"/> Y | <input checked="" type="checkbox"/> N | <u>.049"</u> |
| PHOTO REQUIRED | <input checked="" type="checkbox"/> Y | <input checked="" type="checkbox"/> N | |
| CORRECT MATERIAL | <input checked="" type="checkbox"/> Y | <input checked="" type="checkbox"/> N | |
| CORRECT REF # TO LINK CERT | <input checked="" type="checkbox"/> Y | <input checked="" type="checkbox"/> N | <u>HEAT# 4X1501783</u> |
| CORRECT MATERIAL IDENTIFICATION | <input checked="" type="checkbox"/> Y | <input checked="" type="checkbox"/> N | |
| CORRECT M# ON THE MATERIAL | <input checked="" type="checkbox"/> Y | <input checked="" type="checkbox"/> N | <u>M135857</u> |
| DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF | <input checked="" type="checkbox"/> Y | <input checked="" type="checkbox"/> N | |
| DOES THIS REQUIRE AN EXTRUSION REPORT | <input checked="" type="checkbox"/> Y | <input checked="" type="checkbox"/> N | |

| CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW | | | | | |
|--|-----|-----|-------|-------|--|
| TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING | HRC | HRB | DUR A | DUR D | |
| | | | | | |
| | | | | | |

testers located in the Quality Office

| QC 18 INSPECTION | | ENGINEERING SIGNOFF (if required) |
|--|-------------------------------------|-----------------------------------|
| INSPECTED BY: <u>DAS 14</u> DATE: <u>16/10/12</u> | SIGNED OFF BY: _____ DATE: _____ | |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6 T.500W.058

PO / BATCH NO.: 33860/135857

DATE: 16/10/12

MATERIAL CERT REC'D: yes

THICKNESS ORDERED: .058

QUANTITY RECEIVED: 84'

THICKNESS RECEIVED: .054

QUANTITY INSPECTED: 84'

SHEET SIZE ORDERED: _____

QUANTITY REJECTED: _____

SHEET SIZE RECEIVED: _____

| DESCRIPTION | NCR (Check Y/N) | | COMMENTS |
|--|-----------------------|-----|----------------|
| SURFACE DAMAGE | Y | (N) | |
| CORRECT FINISH | (Y) | N | |
| CORROSION | Y | (N) | |
| CORRECT GRAIN DIRECTION | (Y) | N | |
| CORRECT MATERIAL | (Y) | N | |
| CORRECT THICKNESS | (Y) | N | .054" |
| PHOTO REQUIRED | Y | (N) | |
| CORRECT MATERIAL | (Y) | N | |
| CORRECT REF # TO LINK CERT | (Y) | N | HEAT# 35361464 |
| CORRECT MATERIAL IDENTIFICATION | (Y) | N | |
| CORRECT M# ON THE MATERIAL | (Y) | N | M135857 |
| DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF | Y | (N) | |
| DOES THIS REQUIRE AN EXTRUSION REPORT | Y | (N) | |

| CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW | | | | | |
|--|-----|-----|-------|-------|--|
| TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING | HRC | HRB | DUR A | DUR D | |
| | | | | | |
| | | | | | |

testers located in the Quality Office

| QC 18 INSPECTION | | ENGINEERING SIGNOFF (If required) |
|---|-------------------------------------|-----------------------------------|
| INSPECTED BY: <u>DA 14</u> DATE: <u>16/10/12</u> | SIGNED OFF BY: _____ DATE: _____ | |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304 TR0315 W .065
 DATE: 16-10-17

PO / BATCH NO.: P03360 / M135857

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 20
 QUANTITY INSPECTED: 20
 QUANTITY REJECTED: 0

THICKNESS ORDERED: .065
 THICKNESS RECEIVED: .065
 SHEET SIZE ORDERED: 11/11
 SHEET SIZE RECEIVED: 11/11

| DESCRIPTION | NCR (Check Y/N) | COMMENTS |
|--|--|---------------|
| SURFACE DAMAGE | Y <input checked="" type="radio"/> N <input type="radio"/> | |
| CORRECT FINISH | <input checked="" type="radio"/> Y <input type="radio"/> N | |
| CORROSION | Y <input type="radio"/> N <input checked="" type="radio"/> | |
| CORRECT GRAIN DIRECTION | <input checked="" type="radio"/> Y <input type="radio"/> N | |
| CORRECT MATERIAL | <input checked="" type="radio"/> Y <input type="radio"/> N | |
| CORRECT THICKNESS | <input checked="" type="radio"/> Y <input type="radio"/> N | |
| PHOTO REQUIRED | Y <input type="radio"/> N <input checked="" type="radio"/> | |
| CORRECT MATERIAL | <input checked="" type="radio"/> Y <input type="radio"/> N | ASTM A213 |
| CORRECT REF # TO LINK CERT | <input checked="" type="radio"/> Y <input type="radio"/> N | Ht# Y21410664 |
| CORRECT MATERIAL IDENTIFICATION | <input checked="" type="radio"/> Y <input type="radio"/> N | |
| CORRECT M# ON THE MATERIAL | <input checked="" type="radio"/> Y <input type="radio"/> N | |
| DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF | Y <input type="radio"/> N <input checked="" type="radio"/> | |
| DOES THIS REQUIRE AN EXTRUSION REPORT | Y <input type="radio"/> N <input checked="" type="radio"/> | |

| CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW | | | | |
|--|-----|-----|-------|-------|
| TYPE OF MATERIAL | HRC | HRB | DUR A | DUR D |
| SIZE OF TEST SAMPLE | | | | |
| HARDNESS / DUROMETER READING | | | | |

testers located in the Quality Office

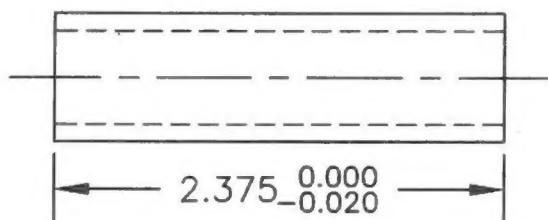
| | |
|---------------------------|--|
| QC 18 INSPECTION | ENGINEERING SIGNOFF (if required) |
| INSPECTED BY: <u>9-89</u> | SIGNED OFF BY: _____ |
| DATE: <u>16-10-17</u> | DATE: _____ |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

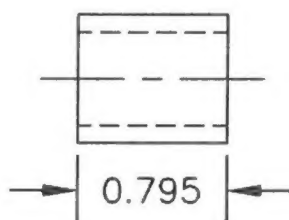


| | | | |
|-------------------------------|--------------------------------|---|------------------------|
| DESIGN BW | DRAWN BY <i>[Signature]</i> | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED <i>[Signature]</i> | APPROVED <i>[Signature]</i> | DRAWING NO. D2282 | REV. E SHEET 1 OF 2 |
| DATE 05.06.07 | | TITLE HANDLE TUBES | SCALE 1:1 |
| A | 94.10.14 | NEW ISSUE | |
| B | 95.03.23 | RE-DESIGN | |
| C | 97.10.20 | CORRECTED NUMBERING SCHEME | |
| D | 05.03.16 | REDESIGN D2282-5; 0.795 WAS 0.750 | |
| E | 05.06.07 | D2282-5 304 SS WAS 303 SS; R0.063 x 0.063 WAS R0.080 x 0.030 | |

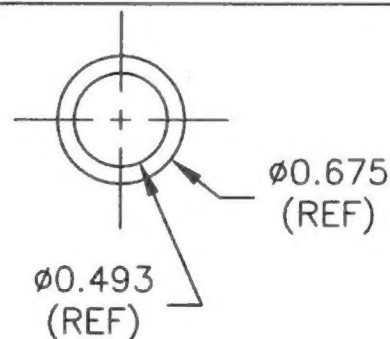
RELEASED
[Signature]
05/09/16



D2282-3



D2282-7

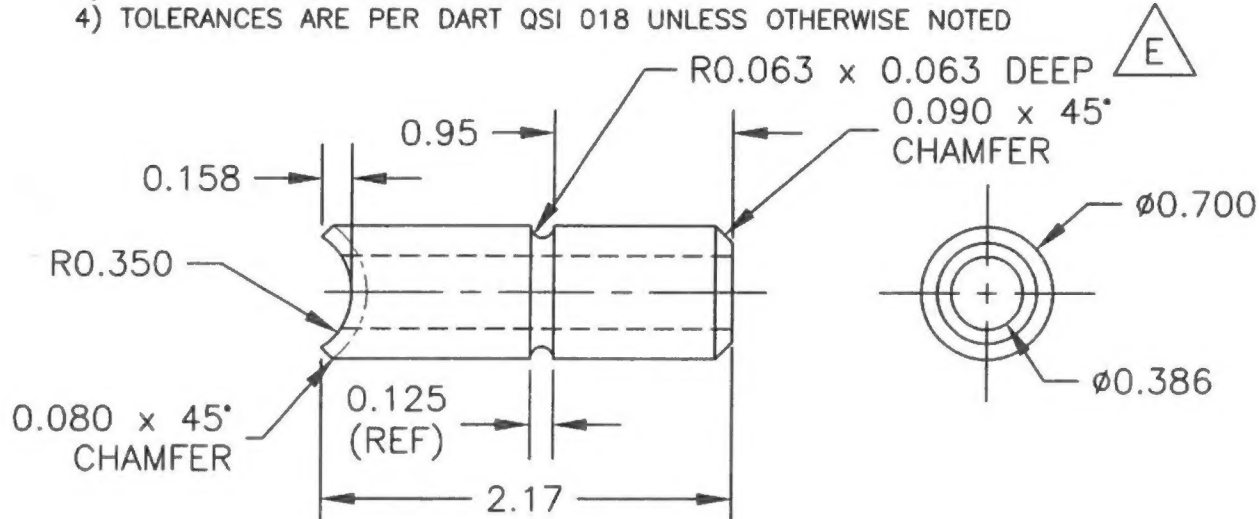


DAS
13
9-89

OCT 05 2016

D2282-3/-7 TUBE:

- 1) MATERIAL: T304/T316 3/8 SCHEDULE 40 (REF. DART SPEC. M304TR0.675W.091)
- 2) BREAK ALL UMARKED SHARP EDGES 0.005 TO 0.010
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



D2282-5

D2282-5 STEM:

- 1) MATERIAL: AISI 304 STAINLESS STEEL (REF. DART SPEC. M304R0.750)
- 2) BREAK ALL UMARKED SHARP EDGES 0.005 TO 0.010
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO33860

Purchase Order Date 10/5/2016

PO Print Date 10/5/2016

Page Number 1 of 3

Order From :

VU-TWM001

TW METALS
PO BOX 933014
ALTANTA, GA 31193-3014
US

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED

OCT 05 2016

Contact Name

Vendor Phone 585 768 5600

Ship To Contact

Ship To Phone

Ship Via: YRC COLLECT

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

| Line Nbr | Reference Vendor Part Number | Description/ Mfg ID | Req Date/ Taxable | CD | Req Qty/ Unit of Measure | PO Unit Price | Extended Price |
|----------|---|--------------------------|-------------------|----|--------------------------|---------------|----------------|
| | Line Comments | | Promise Date | | | | |
| | Delivery Comments | | | | | | |
| 1 | M304TR0.375W.065 | 304 RD Tube .375 x .065W | 10/13/2016 | | 20.00 | \$1.85 | \$37.00 |
| | | | Yes | | f | | |
| | | | 10/13/2016 | | | | |
| | MATERIAL: AISI 304/316 SA SEAMLESS ROUND TUBING AS PER ASTM A213 OR AMSE SA213 OR ASTM A269 | | | | | | |
| | 9-89 | | | | | | |
| | Sp 16-10-11 | | | | | | |
| | Line Total: | | | | | | \$37.00 |
| 2 | M304TR0.675W.091 | 304 RD Tube .675 x .091W | 10/13/2016 | | 60.00 | \$5.00 | \$300.00 |
| | | | Yes | | f | | |
| | | | 10/13/2016 | | | | |
| | MATERIAL: AISI 304/316 SA SEAMLESS ROUND TUBING AS PER ASTM A213 OR AMSE SA213 OR ASTM A269 | | | | | | |
| | NOTE: MATERIAL T304/T316 3/8 SCHEDULE 40 (REF. DART SPEC. M304TR0.675W.091) AS PER DWG D2282 REV. E | | | | | | |
| | Line Total: | | | | | | \$300.00 |

Note:

10/5/2016



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO33860

Purchase Order Date 10/5/2016

PO Print Date 10/5/2016

Page Number 2 of 3

Order From :

VU-TWM001

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

TW METALS
PO BOX 933014
ALTANTA, GA 31193-3014
US

Contact Name

Vendor Phone 585 768 5600

Ship To Contact

Ship To Phone

Ship Via: YRC COLLECT

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

| | | | | | | |
|---|------------------|--------------------------|------------|-------|--------|----------|
| 3 | M304TR0.750W.049 | 304 RD Tube .750 x .049W | 10/13/2016 | 60.00 | \$2.10 | \$126.00 |
| | | | Yes | f | | |
| | | | 10/13/2016 | | | |

MATERIAL: AISI 304/316 SA SEAMLESS ROUND TUBING
AS PER ASTM A213 OR AMSE SA213 OR ASTM A269

Line Total: \$126.00

| | | | | | | |
|---|--------------------|-----------------------------|------------|-------|--------|----------|
| 4 | M6061T6T0.500W.058 | 6061-T6 RD Tube .500 x.058W | 10/13/2016 | 84.00 | \$1.75 | \$147.00 |
| | | | Yes | f | | |
| | | | 10/13/2016 | | | |

MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING
AS PER WW-T-700/6 OR QQ-A-200/8 OR QQ-A-225/8 OR
AMS 4080 OR AMS 4082 OR AMS 4083 OR ASTM B210 OR
ASTM B241

Line Total: \$147.00

| | | | | | | |
|---|--------------------|------------------------------|------------|-------|--------|----------|
| 5 | M6061T6T0.625W.125 | 6061-T6 RD Tube 0.625 X.125W | 10/13/2016 | 24.00 | \$5.15 | \$123.60 |
| | | | Yes | f | | |
| | | | 10/13/2016 | | | |

MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING
AS PER WW-T-700/6 OR QQ-A-200/8 OR QQ-A-225/8 OR
AMS 4080 OR AMS 4082 OR AMS 4083 OR ASTM B210 OR
ASTM B241

Note:

10/5/2016

Sp16-10-11.



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO33860**

Purchase Order Date 10/5/2016

PO Print Date 10/5/2016

Page Number 3 of 3

Order From :

VU-TWM001

Ship To : DART AEROSPACE LTD

TW METALS
PO BOX 933014
ALTANTA, GA 31193-3014
US

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 585 768 5600

Ship To Contact

Ship To Phone

Ship Via: YRC COLLECT

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

Line Total: \$123.60

| | | | | | | |
|---|----------|--------------------------------|------------|------|--------|--------|
| 6 | 71401-45 | PROCUREMENT QUALITY CLAUSES | 10/13/2016 | 1.00 | \$0.00 | \$0.00 |
|---|----------|--------------------------------|------------|------|--------|--------|

No

Procurement Quality Clauses

10/13/2016

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable)

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

Line Total: \$0.00

PO Total: \$733.60

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 1

Change Date: 10/5/2016